Understanding Basic Concept of Electrical and Electronic Systems

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CONTENTS

19. CLASS-A AMPLIFIER

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19.0 Abstract:

The class-A amplifier is the most common and simplest form of power amplifier that uses the switching transistor in the standard common emitter circuit. The transistor is always biased "ON" so that it conducts during one complete cycle of the input signal waveform producing minimum distortion and maximum amplitude to the output. Class A power amplifier output stages may use a single power transistor or pairs of transistors connected together to share the high load current. When an amplifier is biased such that it always operates in the linear region where the output signals is an amplifier replica of the input signal, it is a Class A amplifier.

19.1 Apparatus Required

S.No	Equipment	Range/ Details	Quantity
1.	Transistors	BC 107	1
2.	Resistor	1 KΩ, 4.7KΩ, 47KΩ, 10 KΩ all are ¼ W	1
3.	Capacitor	47μF, 100μF	1
4.	CRO	(0-20MHz)	1
5.	AFO	(0-1MHz)	1
6.	RPS		1
7.	Connecting wires & Breadboard		